

REMARKS

Claim Rejections - 35 U.S.C. §112

The Examiner has rejected Claim 6 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claim 6 has been cancelled.

Double Patenting

Claims 1-11 and 16-20 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of Xia et al. (U.S. Patent No. 6,177,344) in view of Xia et al. (J. Electrochem. Soc.) and claims 12-14 and 21 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1-23 of Xia et al. ('344) in view of Xia et al. (J. Electrochem.) and EP 843348 (EP'348). Applicant is submitting a terminal disclaimer to Xia et al. (U.S. Patent No. 6,177,344) in compliance with 37 CFR 1.321(c).

Claim Rejections - 35 U.S.C. §103


The Examiner has rejected claims 1-11 and 16-20 under 35 USC 103(a) as being obvious over Xia et al. ('344). The Examiner has rejected claims 12-14 and 21 under 35 USC 103(a) as being obvious over Xia et al. ('344) in view of EP 843348 (EP '348). The Examiner has rejected claims 1-14 and 16-21 under 35 USC 103(a) as being obvious over EP 843348 (EP'348) in view of Xia et al. (J. Electrochem). The Applicant respectfully traverses. The cited references do not teach or render obvious all elements of the Applicant's claims. In particular, the cited references do not teach the element of the independent claims 1 and 12 of providing a substrate in a vacuum sealed multi-chamber system, depositing a borophosphosilicate glass layer on the substrate within a first chamber of the multi-chamber system; and reflowing the deposited borophosphosilicate glass layer on the substrate within a second chamber within the multi-chamber system. In contrast, Xia ('344) only teaches reflowing a pre-formed BPSG film in a chamber without stating where the pre-formed BPSG film was formed (Col. 4 lines 11 – 23). EP '348 teaches depositing a BPSG film and reflowing the BPSG film within the same chamber (pg. 56 lines 16 - 23.) Xia et al. (J. Electrochem.) teaches depositing a BPSG film in a first chamber (2nd paragraph pg. 1884) and reflowing the BPSG film in a second chamber (3rd paragraph pg. 1884), but fails to teach that the first chamber and the second chamber are within a vacuum sealed multi-chamber system. Therefore, the Applicant respectfully submits that the cited references, either individually or in combination, do not teach or render obvious the independent claims 1 and 12 and the dependent claims 2-11 and 13-20 that depend upon the independent claims 1 and 12, respectively.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

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